

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-3 (Canceled).

1 4. (Currently Amended) A method for synchronizing a digital video host
2 system including a host computer **having a microprocessor**, a receiver circuit and a decoder
3 circuit, the method comprising:
4 (a) coupling the receiver circuit with the decoder circuit only through separate
5 nodes of a bus in the host computer;
6 (b) maintaining synchronization between the receiver circuit and the transmitter,
7 without utilizing the host **microprocessor computer**, by receiving a first transport packet from a
8 transmitter with the receiver circuit; capturing a first system time clock (STC) timestamp at a
9 start of receiving the first transport packet, the first STC timestamp being captured into a latch;
10 obtaining a program clock reference (PCR) timestamp from the transport packet; comparing the
11 first STC timestamp to the PCR timestamp to generate a comparison result; and adjusting an
12 STC frequency based on the comparison result;
13 (c) capturing, with the decoder circuit, a system timestamp for an application
14 system coupled with the decoder circuit but not with the receiver circuit; and
15 (d) adjusting the system timestamp with an offset based on a message delay time
16 between the decoder circuit and the receiver circuit to maintain synchronization between the
17 decoder circuit and the receiver circuit.

Claims 5-6 (Canceled).

1 7. (Previously presented) The method according to claim 4 further
2 comprising:
3 (e) receiving data from the decoder circuit into a first register in a bus interface on
4 the bus in the host computer;

5 (f) latching a second STC timestamp into a second register in the bus interface
6 after receiving the data from the decoder circuit; and
7 (g) providing the second STC timestamp to the decoder circuit by way of the
8 second register.

1 8. (Previously presented) The method according to claim 4 wherein the
2 application system comprises an audio-visual system and the decoder circuit comprises an audio-
3 visual interface.

1 9. (Previously presented) The method according to claim 4 wherein the
2 application system comprises a networked computer system and the decoder circuit comprises a
3 computer network interface.

Claims 10-12 (Canceled).

1 13. (Currently Amended) A system for synchronizing a digital video host
2 system including a host computer **having a microprocessor**, a receiver circuit and a decoder
3 circuit, the system comprising:

4 (a) a bus in the host computer having the receiver circuit and the decoder circuit
5 on separate nodes thereof;

6 (b) the receiver circuit being adapted to maintain the synchronization between the
7 receiver circuit and the transmitter without using the host **microprocessor**~~computer~~ and
8 comprising: a parser adapted to obtain a program clock reference (PCR) timestamp from a first
9 transport packet, the first transport packet including the PCR timestamp; a first latch coupled to
10 the parser, the first latch being adapted to capture a first system time clock (STC) timestamp near
11 a beginning of receipt of a first transport packet from a transmitter by the receiver circuit; a
12 comparison device coupled to the parser and to the latch, the comparison device being
13 configured to compare the STC timestamp to the PCR timestamp so as to generate a comparison
14 result; and a first adjuster coupled to the comparison device, the first adjuster being adapted to
15 adjust a frequency of the system time clock based on the comparison result;

16 (c) a second latch in the decoder circuit, the second latch being adapted to capture
17 a system timestamp for an application system coupled with the decoder circuit but not with the
18 receiver circuit; and

19 (d) a second adjuster coupled to the decoder circuit, the second adjuster being
20 adapted to adjust the system timestamp with an offset based on a message delay time between
21 the decoder circuit and the receiver circuit to maintain synchronization between the decoder
22 circuit and the receiver circuit.

Claims 14-15 (Canceled).

1 16. (Previously presented) The system according to claim 13 further
2 comprising:

3 (e) a first register in a bus interface comprised by the bus in the host computer,
4 the first register being adapted to receive data from the decoder circuit; and

5 (f) a second register in the bus interface, the second register being adapted to
6 latch a second STC timestamp after the first register receives the data from the decoder circuit,
7 wherein the second STC timestamp is provided to the decoder circuit by way of
8 the second register.

1 17. (Previously presented) The system according to claim 13 wherein the
2 application system comprises an audio-visual system and the decoder circuit comprises an audio-
3 visual interface.

1 18. (Previously presented) The system according to claim 13 wherein the
2 application system comprises a networked computer system and the decoder circuit comprises a
3 computer network interface.

1 19. (Previously presented) The method according to claim 4 wherein the
2 offset is scaled by a nonunity value.

1 20. (Currently amended) A method for synchronizing a digital video host
2 system including a host computer **having a microprocessor**, a receiver circuit and a decoder
3 circuit, the method comprising:

4 (a) coupling the receiver circuit with the decoder circuit only through a bus in the
5 host computer

6 (b) maintaining synchronization between the receiver circuit and the transmitter,
7 without utilizing the host **microprocessor computer**, by receiving a first transport packet from a
8 transmitter with the receiver circuit; capturing a first system time clock (STC) timestamp at a
9 start of receiving the first transport packet, the first STC timestamp being captured into a latch;
10 obtaining a program clock reference (PCR) timestamp from the transport packet; comparing the
11 first STC timestamp to the PCR timestamp to generate a comparison result; and adjusting an
12 STC frequency based on the comparison result;

13 (c) receiving data from the decoder circuit into a first register in a bus interface
14 comprised by the bus;

15 (d) latching a second STC timestamp into a second register in the bus interface
16 after receiving the data from the decoder circuit; and

17 (e) providing the second STC timestamp to the decoder circuit by way of the
18 second register.

1 21. (Previously presented) The method according to claim 20 wherein the
2 decoder circuit comprises an audio-visual interface.

1 22. (Previously presented) The method according to claim 20 wherein the
2 decoder circuit comprises a computer network interface.

1 23. (Previously presented) The system according to claim 13 wherein the
2 offset is scaled by a nonunity value.

1 24. (Currently amended) A system for synchronizing a digital video host
2 system including a host computer **having a microprocessor**, a receiver circuit and a decoder
3 circuit, the system comprising:

4 (a) a bus in the host computer that couples the receiver circuit with the decoder
5 circuit;

6 (b) the receiver circuit being adapted to maintain the synchronization between the
7 receiver circuit and the transmitter without using the host **microprocessor computer** and
8 comprising: a parser adapted to obtain a program clock reference (PCR) timestamp from a first
9 transport packet, the first transport packet including the PCR timestamp; a first latch coupled to
10 the parser, the first latch being adapted to capture a first system time clock (STC) timestamp near
11 a beginning of receipt of a first transport packet from a transmitter by the receiver circuit; a
12 comparison device coupled to the parser and to the latch, the comparison device being
13 configured to compare the STC timestamp to the PCR timestamp so as to generate a comparison
14 result; and a first adjuster coupled to the comparison device, the first adjuster being adapted to
15 adjust a frequency of the system time clock based on the comparison result;

16 (c) a first register in a bus interface comprised by the host-system bus, the first
17 register being adapted to receive data from the decoder circuit; and

18 (d) a second register in the bus interface, the second register being adapted to
19 latch a second STC timestamp after the first register receives the data from the decoder circuit,
20 wherein the second STC timestamp is provided to the decoder circuit by way of the second
21 register.

1 25. (Previously presented) The system according to claim 24 wherein the
2 decoder circuit comprises an audio-visual interface.

26. (Previously presented) The system according to claim 24 wherein the
decoder circuit comprises a computer network interface.